IN THE CLAIMS

Please amend the claims as follows.

1. (Withdrawn, Previously Presented) A method of forming an inductor, comprising:

depositing a layer of magnetic material on a germanium substrate;

depositing a non-magnetic insulating layer on the magnetic material layer;

depositing a triangular open inductor pattern on the insulating layer and above the magnetic material layer, wherein the open inductor pattern is unconnected to the layer of magnetic material, and wherein depositing the triangular open inductor pattern includes depositing a first conductive pattern and depositing a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

depositing a second non-magnetic insulating layer on the inductor pattern; and

depositing a second magnetic material layer on the second non-magnetic insulating layer and above the open inductor pattern.

2. (Withdrawn) The method of claim 1, wherein the second non-magnetic insulating layer includes parylene.

3. (Withdrawn) The method of claim 1, wherein the layer of magnetic material includes iron.

4. (Withdrawn) The method of 1, wherein the second magnetic material layer includes a NiFe alloy having about 81% Ni and 19%Fe.

5. (Withdrawn, Previously Presented) A method of forming an inductor, comprising:

depositing a layer of magnetic material on a germanium substrate;

depositing a non-magnetic insulating layer on the magnetic material layer;

forming a plurality of sandwich structures vertically stacked on the insulating layer, the structures comprising:

an open inductor pattern including a first conductive pattern and a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

a first non-magnetic insulating layer deposited on the open inductor pattern;

a layer of magnetic material deposited on the first non-magnetic insulating layer;

a second non-magnetic insulating layer deposited on the magnetic material layer; and

forming a conductive path through the plurality of sandwich structures such that each open inductor pattern is serially connected to the inductor pattern above by the conductive path, and such that a current flowing in the serially connected inductor patterns creates a reinforcing magnetic field in the layer of magnetic material between adjacent inductor patterns.

6. (Withdrawn) The method of claim 5, wherein the layer of magnetic material includes iron.

7. (Withdrawn) The method of claim 5, wherein the non-magnetic insulating layer includes an inorganic silicon oxide film.

8. (Withdrawn) The method of claim 5, wherein the open inductor pattern includes gold.

9. (Withdrawn, Previously Presented) A method of forming an inductor, comprising:

depositing a layer of magnetic material on a silicon-on-sapphire substrate;

depositing an insulating layer on the magnetic material layer;

forming a plurality of sandwich structures vertically stacked on the insulating layer, the structures comprising:

an open inductor pattern including a first conductive pattern and a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

an insulating layer deposited on the open inductor pattern; and

a layer of magnetic material deposited on the insulating layer and above the open inductor pattern;

an insulating layer deposited on the magnetic material layer; and

forming a conductive path through the plurality of sandwich structures such each of the plurality of sandwich structures connected by the conductive path, and such that a current

flowing in the plurality of sandwich structures creates a reinforcing magnetic field in the layer of magnetic material between adjacent inductor patterns.

10. (Withdrawn) The method of claim 9, wherein the second non-magnetic insulating layer includes polyimide.

11. (Withdrawn) The method of claim 9, wherein the layer of magnetic material includes iron.

12. (Withdrawn) The method of claim 9, wherein the second magnetic material layer includes a NiFe alloy.

13. (Previously Presented) A method of forming an inductor, comprising:

depositing a layer of magnetic material on a substrate;

depositing a non-magnetic insulating layer on the magnetic material layer;

forming a substantially circular open inductor pattern on the non-magnetic insulating layer and above the magnetic material layer, the open inductor pattern having an outer edge, wherein the open inductor pattern is unconnected to the layer of magnetic material, and wherein forming the substantially circular open inductor pattern includes forming a first conductive pattern and forming a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

depositing a second non-magnetic insulating layer on the open inductor pattern; and

depositing a second magnetic material layer on the second non-magnetic insulating layer.

14. (Previously Presented) The method of claim 13, wherein the substantially circular open inductor pattern includes gold.

15. (Previously Presented) The method of claim 13, wherein the substantially circular open inductor pattern includes aluminium-copper.

16. (Previously Presented) The method of claim 13, wherein the non-magnetic insulating layer includes silicon dioxide.

17. (Previously Presented) The method of claim 13, wherein the second non-magnetic insulating layer includes an organic insulator.

18. (Previously Presented) A method of forming an inductor comprising:

depositing a layer of magnetic material on a substrate;

depositing a non-magnetic insulating layer on the magnetic material layer;

forming a circular open inductor pattern on the non-magnetic insulating layer and above the magnetic material layer, the open inductor pattern having an outer edge, wherein the open inductor pattern is unconnected to the layer of magnetic material, and wherein forming the circular open inductor pattern includes forming a first conductive pattern and forming a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

depositing a second non-magnetic insulating layer on the open inductor pattern; and

depositing a second magnetic material layer on the second non-magnetic insulating layer.

19. (Previously Presented) The method of claim 18, wherein the circular open inductor pattern includes at least one of gold and aluminium-copper.

20. (Previously Presented) The method of claim 18, wherein the layer of magnetic material includes iron.

21. (Previously Presented) The method of claim 18, wherein the second non-magnetic insulating layer includes polyimide.

22. (Previously Presented) A method of forming an inductor comprising:

depositing a layer of magnetic material on a substrate;

depositing a non-magnetic insulating layer on the magnetic material layer;

forming a circular open inductor pattern on the non-magnetic insulating layer and above the magnetic material layer, the open inductor pattern having an outer edge, wherein the open inductor pattern is unconnected to the layer of magnetic material, and wherein forming the circular open inductor pattern includes forming a first conductive pattern and forming a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

depositing a second non-magnetic insulating layer on the open inductor pattern; and

depositing a second magnetic material layer on the second non-magnetic insulating layer, the second magnetic material layer including a NiFe alloy having about 81% Ni and 19%Fe.

23. (Previously Presented) A method of forming an inductor, comprising:

depositing a layer of magnetic material on a silicon-on-sapphire substrate;

depositing a non-magnetic insulating layer on the magnetic material layer;

forming a substantially circular open inductor pattern on the non-magnetic insulating layer and above the magnetic material layer, wherein the open inductor pattern is unconnected to the layer of magnetic material, and wherein forming the substantially circular open inductor pattern includes forming a first conductive pattern and forming a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

depositing a second non-magnetic insulating layer on the open inductor pattern; and

depositing a second magnetic material layer on the second non-magnetic insulating layer.

24. (Original) The method of claim 23, wherein the second non-magnetic insulating layer comprises parylene.

25. (Previously Presented) The method of claim 23, wherein the layer of magnetic material includes iron.

26. (Previously Presented) A method of forming an inductor, comprising:

depositing a layer of magnetic material on a silicon-on-sapphire substrate;

depositing a non-magnetic insulating layer on the magnetic material layer;

forming a substantially circular open inductor pattern on the non-magnetic insulating layer and above the magnetic material layer, wherein the open inductor pattern is unconnected to the layer of magnetic material, and wherein forming the substantially circular open inductor pattern includes forming a first conductive pattern and forming a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

depositing a second non-magnetic insulating layer on the open inductor pattern; and

depositing a second magnetic material layer on the second non-magnetic insulating layer, the second magnetic material layer including a NiFe alloy having about 81% Ni and 19%Fe.

27. (Previously Presented) A method of forming an inductor, comprising:

depositing a layer of magnetic material on a gallium arsenide substrate;

depositing a non-magnetic insulating layer on the magnetic material layer;

forming a substantially circular open inductor pattern on the non-magnetic insulating layer and above the magnetic material layer, wherein the open inductor pattern is unconnected to the layer of magnetic material, and wherein forming the substantially circular open inductor pattern includes forming a first conductive pattern and forming a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

depositing a second non-magnetic insulating layer on the open inductor pattern; and

depositing a second magnetic material layer on the second non-magnetic insulating layer.

28. (Previously Presented) The method of claim 27, wherein the layer of magnetic material includes iron.

29. (Previously Presented) The method of claim 27, wherein the non-magnetic insulating layer includes inorganic silicon oxide film.

30. (Previously Presented) The method of claim 27, wherein the second non-magnetic insulating layer includes polyimide.

31. (Withdrawn, Previously Presented) A method of forming an inductor, comprising:

depositing a layer of magnetic material on a substrate;

depositing a non-magnetic insulating layer on the magnetic material layer;

forming a plurality of sandwich structures vertically stacked on the insulating layer, the structures comprising:

a substantially circular open inductor pattern having an outer edge, a first conductive pattern and a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

a first non-magnetic insulating layer deposited on the open inductor pattern;

a layer of magnetic material deposited on the first non-magnetic insulating layer;

a second non-magnetic insulating layer deposited on the magnetic material layer; and

forming conductive path through the plurality of sandwich structures such that each open inductor pattern is serially connected to the inductor pattern above by the conductive path, and such that a current flowing in the serially connected inductor patterns creates a reinforcing magnetic field in the layer of magnetic material between adjacent inductor patterns.

32. (Withdrawn) The method of claim 31, wherein the layer of magnetic material includes a high permeability ferromagnetic material.

33. (Withdrawn) The method of claim 31, wherein the open inductor pattern includes a high conductivity material.

34. (Previously Presented) A method of forming an inductor, comprising:

depositing a magnetic material layer on a substrate;

depositing a non-magnetic insulating layer on the magnetic material layer;

depositing an open inductor pattern on the non-magnetic insulating layer and above the magnetic material layer, wherein the open inductor pattern is unconnected to the magnetic material layer, and wherein depositing the open inductor pattern includes depositing a first conductive pattern and depositing a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

depositing a second non-magnetic insulating layer on the open inductor pattern; and

depositing a second magnetic material layer on the second non-magnetic insulating layer.

35. (Previously Presented) The method of claim 22, wherein the open inductor pattern includes iron.

36. (Previously Presented) The method of claim 22, wherein the non-magnetic insulating layer includes silicon dioxide.

37. (Previously Presented) The method of claim 26, wherein the open inductor pattern includes iron.

38. (Previously Presented) The method of claim 26, wherein the non-magnetic insulating layer includes organic material.

39. (Previously Presented) A method of forming an inductor, comprising:

forming a magnetic material layer on a substrate;

forming a non-magnetic insulating layer on the magnetic material layer;

forming an open inductor pattern on the non-magnetic insulating layer and above the magnetic material layer, wherein forming the open inductor pattern includes forming a first conductive pattern and forming a second conductive pattern over the first conductive pattern and coupled to the first conductive pattern;

forming a second non-magnetic insulating layer on the open inductor pattern; and

forming a second magnetic material layer on the second non-magnetic insulating layer.

40. (New) The method of claim 13, wherein forming the first conductive pattern of the substantially circular open inductor pattern includes forming outermost segments of the first conductive pattern with a region interior thereto that is free of additional segments, and wherein forming the second conductive pattern of the substantially circular open inductor pattern includes

forming outermost segments of the second conductive pattern with a region interior thereto that is free of additional segments.

41. (New) The method of claim 39, wherein forming the first conductive pattern of the open inductor pattern includes forming outermost segments of the first conductive pattern with a region interior thereto that is free of additional segments, and wherein forming the second conductive pattern of the open inductor pattern includes forming outermost segments of the second conductive pattern with a region interior thereto that is free of additional segments.